






- Miniature dimensions
- General purpose relays
- Protection category IP 40 or IP 67
- For PCB and plug-in sockets
- DC coils - standard and sensitive
- Recognitions, certifications, directives: RoHS,   

## Contact data

Number and type of contacts		1 C/O, 1 NO, 1 NC
Contact material		<b>AgCu/Au 0,2 µm</b> , AgCdO, AgCdO/Au 3 µm
Rated / max. switching voltage	AC	250 V / 440 V
Min. switching voltage		10 V AgCu/Au 0,2 µm, 10 V AgCdO, 5 V AgCdO/Au 3 µm
Rated load	AC1	8 A / 250 V AC
	DC1	8 A / 24 V DC
Min. switching current		5 mA AgCu/Au 0,2 µm, 5 mA AgCdO, 2 mA AgCdO/Au 3 µm
Rated current		8 A
Max. breaking capacity	AC1	2 000 VA
Min. breaking capacity		0,5 W AgCu/Au 0,2 µm, 0,5 W AgCdO, 0,05 W AgCdO/Au 3 µm
Contact resistance		≤ 100 mΩ
Max. operating frequency		
• at rated load	AC1	600 cycles/hour
• no load		72 000 cycles/hour

## Coil data

Rated voltage	DC	6 ... 80 V standard version	5 ... 60 V sensitive version
Must release voltage		DC: ≥ 0,1 U <sub>n</sub>	
Operating range of supply voltage		see Tables 1, 2	
Rated power consumption	DC	0,8 W standard version	0,5 W sensitive version

## Insulation according to PN-EN 60664-1

Insulation rated voltage		400 V AC
Dielectric strength		
• between coil and contacts		4 000 V AC type of insulation: reinforced
• contact clearance		1 000 V AC type of clearance: micro-disconnection
Contact - coil distance		
• clearance		≥ 8 mm
• creepage		≥ 8 mm

## General data

Operating / release time (typical values)		6 ms / 2 ms
Electrical life		
• resistive AC1		> 2 x 10 <sup>5</sup> 8 A, 250 V AC
• cos φ		see Fig. 2
Mechanical life (cycles)		> 3 x 10 <sup>7</sup>
Motor load according to UL 508		1/4 HP 120 V AC, single-phase motor
Dimensions (L x W x H)		IP 40: 28 x 11,5 x 26 mm IP 67: 28 x 11,5 x 26,5 mm
Weight		17 g
Ambient temperature	• storage	-40...+85 °C
	• operating	-40...+70 °C
Cover protection category		<b>IP 40</b> or IP 67 PN-EN 60529
Shock resistance		20 g
Vibration resistance		10 g 10...150 Hz
Solder bath temperature		max. 270 °C
Soldering time		max. 5 s

The data in bold type pertain to the standard versions of the relays.

**i** Special version available: relays in transparent cover - see "Ordering codes".

**Coil data - standard DC voltage version**

Table 1

Coil code	Rated voltage V DC	Coil resistance ±10% at 20 °C Ω	Coil operating range at 20 °C V DC	
			min.	max.
1006	6	58	4,0	9,4
1012	12	170	7,4	16,2
<b>1024</b>	<b>24</b>	<b>740</b>	<b>15,4</b>	<b>33,6</b>
1036	36	1 600	23,5	50,0
1048	48	3 200	31,0	70,0
1060	60	5 000	38,0	87,0
1080	80	10 000	55,0	125,0

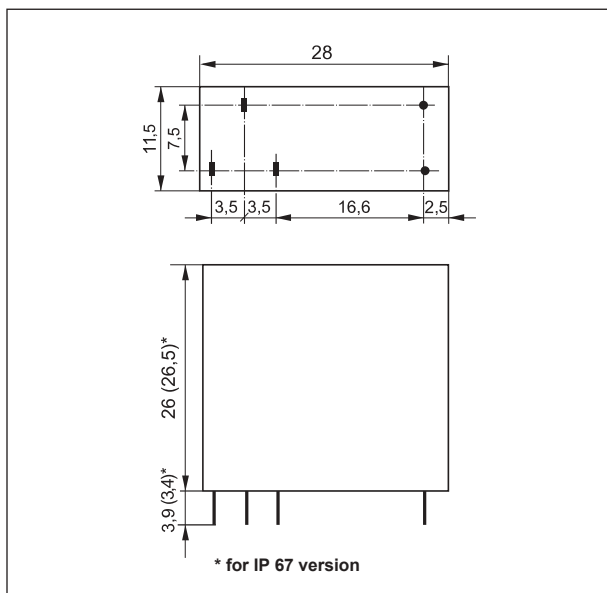
The data in bold type pertain to the standard versions of the relays.

**Coil data - sensitive DC voltage version**

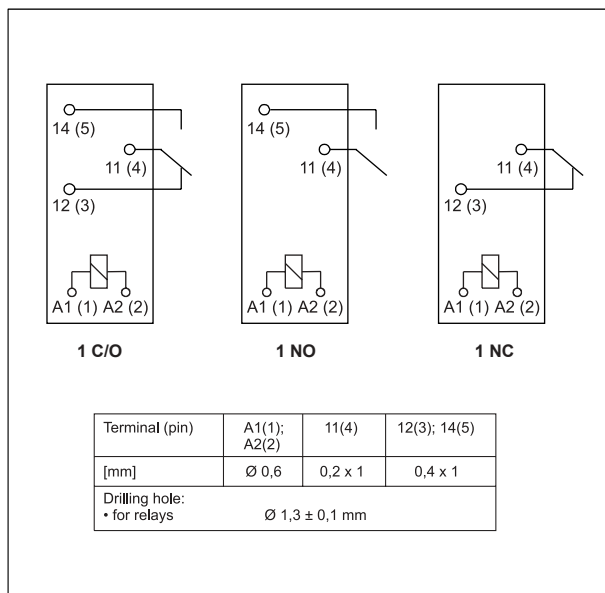
Table 2

Coil code	Rated voltage V DC	Coil resistance ±10% at 20 °C Ω	Coil operating range at 20 °C V DC	
			min.	max.
S005	5	47	3,2	8,5
S006	6	80	4,2	11,0
S012	12	330	8,3	22,5
S024	24	1 200	16,8	43,0
S036	36	2 700	25,0	64,0
S048	48	4 700	32,8	85,0
S060	60	7 200	42,0	105,0

### Dimensions



### Connection diagrams (pin side view)

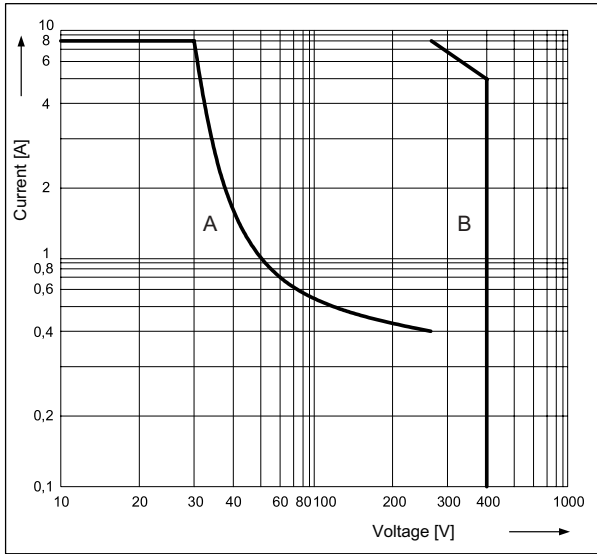


### Mounting

Relays **RM92** are designed for: • direct PCB mounting • plug-in sockets for PCB mounting **EC35** with clip **MP25-2**, MH25-2, GD-0025, RM81-0001; plug-in sockets **GD35** with clip **MP25-2**, GD-0025, MH25-2, RM81-0001.

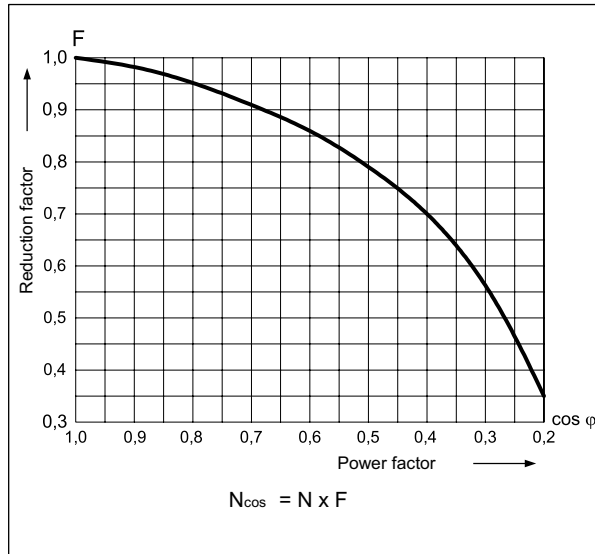
**Max. breaking capacity**  
A - resistive load DC1  
B - resistive load AC1

Fig. 1



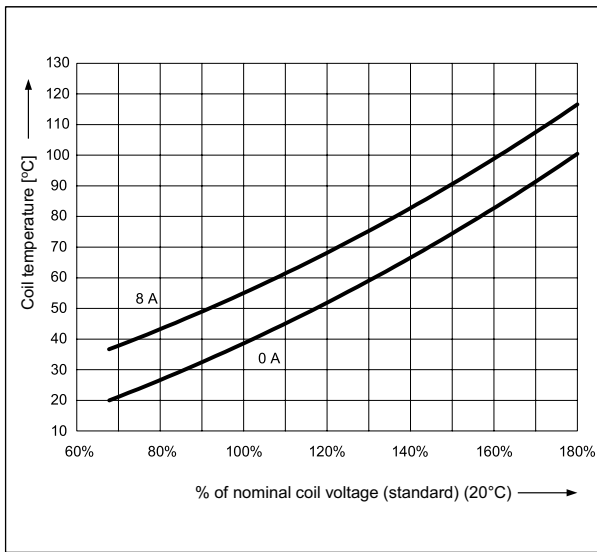
**Electrical life reduction factor at AC inductive load**

Fig. 2



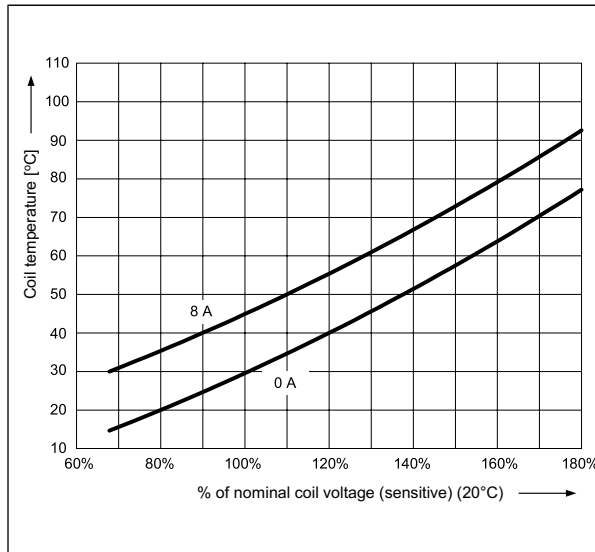
**Coil temperature rise - standard version**

Fig. 3

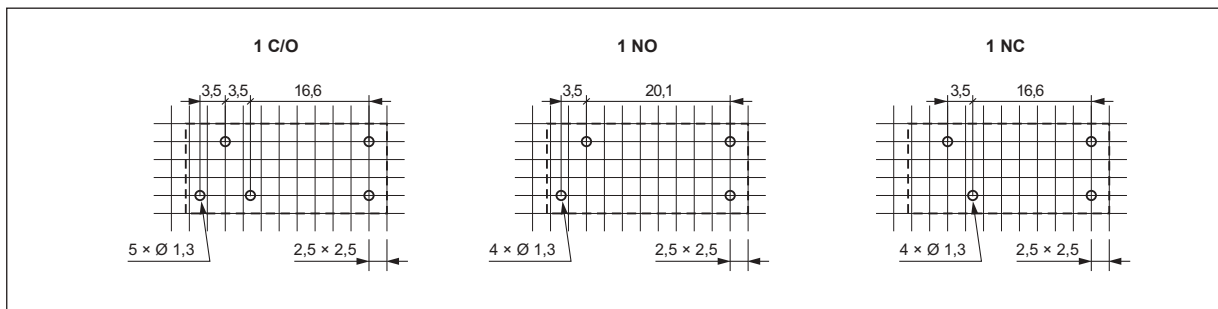


**Coil temperature rise - sensitive version**

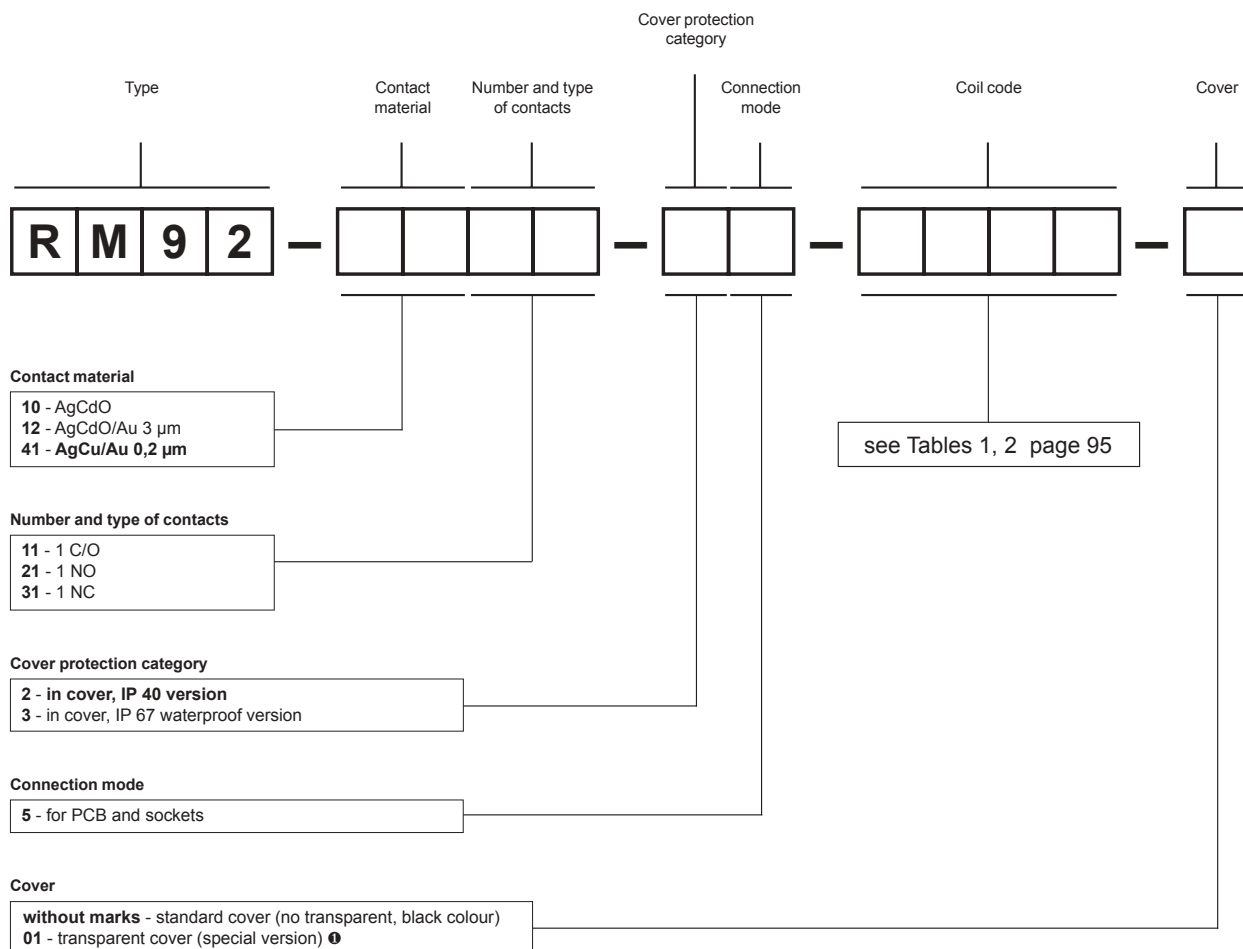
Fig. 4



**Pinout (solder side view)**



## Ordering codes



Examples of ordering codes:

- RM92-4111-25-1024** relay **RM92**, contact material AgCu/Au 0,2 μm, with one changeover contact, in standard cover (no transparent, black colour) IP 40, for PCB and sockets, voltage version 24 V DC
- RM92-4121-35-S024** relay **RM92**, contact material AgCu/Au 0,2 μm, with one normally open contact, in standard cover (no transparent, black colour) IP 67, for PCB and sockets, sensitive voltage version 24 V DC
- RM92-4131-35-1012-01** relay **RM92**, contact material AgCu/Au 0,2 μm, with one normally closed contact, in transparent cover (special version) ① IP 67, for PCB and sockets, voltage version 12 V DC

## Print on relay cover

Type marking on relays cover **RM92** do not match the ordering codes.

Examples of marking:

- RM92P-24-W** **RM92P** - relay **RM92**, with one changeover contact  
**24** - voltage version 24 V DC  
**W** - in cover, IP 67 waterproof version
- RM92P-24-S-W** **RM92P** - relay **RM92**, with one changeover contact  
**24** - voltage version 24 V DC  
**S** - sensitive version  
**W** - in cover, IP 67 waterproof version